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Research Article

Yield gap analysis using Oryza 2000 model in two rice growing districts of Andhra Pradesh

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Summary

The study describes the modeling approach in order to estimate the yield gap in Guntur and Nalgonda districts of Andhra Pradesh. Oryza 2000 model was validated for both districts. Actual yields were collected from Directorate of Economics and Statistics, Andhra Pradesh. Weather information collected from the meteorological departments of the respective regional research stations was used as input parameters of the model Oryza 2000 to determine potential yield. The highest yield gap was recorded in two districts and is related to delay in sowing, management factors and soil related problems. The management gap clearly suggesting the poor and untimely management operations followed by the farmers for one or other reasons. The model estimated yield gap of 3410 and 4012 kg ha⁻¹ in Guntur and Nalgonda districts, respectively.

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Key words: Yield gap, Oryza 2000 model, Potential yield, Rice crop

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